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U.S. PATENT APPLICATION

FOR

SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR COLLECTING STRATEGIC PATENT DATA ASSOCIATED WITH AN IDENTIFIER

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SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR COLLECTING STRATEGIC PATENT DATA ASSOCIATED WITH AN IDENTIFIER

RELATED APPLICATION(S)

The present application is a continuation of US application 10/324,887 filed December 18, 2002, which, in turn, is continuation-in-part of prior US application 10/254,410 filed September 24, 2002, which claims priority from US provisional application 60/324,941, filed September 24, 2001, which are all incorporated herein by reference.

BACKGROUND AND FIELD OF THE INVENTION

The present invention relates to patent management tools, and more particularly to the use of patent management tools to increase the value of patents and exploit the same.

DISCLOSURE OF THE INVENTION

A system, method and computer program product are provided for organizing patents utilizing a computer-implemented system. An identifier is initially determined, after which a notes field is displayed for receiving manually entered notes, such that the manually entered notes are stored in association with the identifier. Further, the manually selection of a file is permitted. Such manually selected file is then stored in association with the identifier. Still yet, a plurality of patents are associated with the identifier. The manually entered notes, the file, and the patents are thus accessible by subsequent selection of the identifier.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure **1** illustrates a network architecture, in accordance with one embodiment.

Figure **2** shows a representative hardware environment that may be associated with the various network components of Figure **1**, in accordance with one embodiment.

Figure **3** illustrates a method for reporting on competing activity during strategic intellectual property management utilizing a computer-implemented system, in accordance with one embodiment.

Figure **4** illustrates an exemplary graphical user interface for registration of intellectual property, in accordance with one embodiment.

Figure **5** illustrates an exemplary graphical user interface for registration of competing intellectual property associated with intellectual property identifiers, in accordance with one embodiment.

Figure **6** illustrates a method for collecting competing activity documentation, in accordance with operation **306** of Figure **3**.

Figure **7** illustrates an exemplary graphical user interface for collecting competing activity documentation from the Internet utilizing a network browser application, in accordance with one embodiment.

Figure **8** illustrates an exemplary graphical user interface for alternatively collecting competing activity documentation from the Internet utilizing any one of three available methods, in accordance with one embodiment.

Figure **9** illustrates a method for further facilitating the identification of the competing activity documentation, in accordance with one embodiment.

Figure **10** shows the manner in which a claim may be converted into a search string.

Figure **11** is a chart showing a data structure associated with the information collected, in accordance with one embodiment.

Figure **12** illustrates an exemplary graphical user interface for defining a report utilizing collected competing activity documentation, in accordance with one embodiment.

Figure **13** illustrates an exemplary technology map report, in accordance with one embodiment.

Figures **13A-B** illustrate other exemplary technology map reports, in accordance with a 3-D embodiment.

Figure **14** illustrates method for providing a graphical user interface such as that of Figure **13** which is equipped for reporting on strategic intellectual property management.

Figure **15** illustrates an exemplary summary report, in accordance with one embodiment.

Figure **16** illustrates an exemplary intellectual property details report, in accordance with one embodiment.

Figure **17** illustrates an exemplary competing patent details report, in accordance with one embodiment.

Figure **18** illustrates an exemplary competing activity details report, in accordance with one embodiment.

Figure **19** illustrates an exemplary patent/license map report, in accordance with one embodiment.

Figure **20** illustrates an exemplary summary report, in accordance with one embodiment.

Figure **21** illustrates a method for strategic intellectual property management utilizing a computer-implemented system, in accordance with one embodiment.

Figure **22** illustrates a sample graphical user interface for listing a plurality of upcoming action items.

Figure **23** illustrates a sample graphical user interface for reporting information relative to an upcoming action items.

Figure **24** illustrates a sample e-mail that may be used to report a decision as to an intellectual property action item for fulfillment, in accordance with one embodiment.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The following description is the best embodiment presently contemplated for carrying out the present invention. This description is made for the purpose of illustrating the general principles of the present invention and is not meant to limit the inventive concepts claimed herein.

Figure **1** illustrates a network architecture **100**, in accordance with one embodiment. As shown, a plurality of networks **102** are provided including a first network **104** and a second network **106**. Also included is at least one gateway **107** coupled between the networks **102** and a third network **108**. In the context of the present network architecture **100**, the networks **104, 106, 108** may each take any form including, but not limited to a local area network (LAN), a wide area network (WAN) such as the Internet, a wireless network, etc. Further, any number of networks may be included.

In use, the gateway **107** serves as an entrance point from the networks **102** to the third network **108**. As such, the gateway **107** may function as a router, which is capable of directing a given packet of data that arrives at the gateway **107**, and a switch, which furnishes the actual path in and out of the gateway **107** for a given packet.

Further included is at least one server **114** coupled to the third network **108**, and which is accessible from the networks **102** via the gateway **107**. It should be noted that the server(s) **114** may include any type of computing device/groupware. Coupled to each server **114** is a plurality of user devices **116**. Such user devices **116** may include a desktop computer, lap-top computer, hand-held computer, printer or any other type of

logic. It should be noted that a user device **117** may also be directly coupled to any of the networks, in one embodiment.

For reasons that will soon become apparent, the user devices **116** and/or server(s) **114** may be equipped with databases **120**, i.e., collections of data. Such databases may include information on intellectual property. For example, the databases **120** may include a plurality of intellectual property identifiers which each identify a specific piece of intellectual property. In the context of the present description, intellectual property refers to any patent, patent application, invention disclosure, trademark, copyright, trade secret, or any other granted or potential right in an intangible entity. In the case of patents, patent applications, and invention disclosures, the aforementioned identifier may include a patent number, patent application serial number, issue date, filing date, docket number, and/or any other information which identifies and/or is associated with the intellectual property.

As an option, for reasons that will soon become apparent, the databases **120** may include business logic include information as to a status of particular products and/or product cycles associated (i.e. protected by) the intellectual property identifiers, current intellectual property budget constraints, ratings associated with the patents, a list of key competitive companies, etc. corresponding with the intellectual property identifiers. Still yet, such ratings may be manually and/or automatically generated based on a traditional factors such as a visibility of the technology covered by a particular patent (important in ascertaining infringement), whether the technology covered by a particular patent is to be adopted as a standard, the level of fundamentality of the technology covered by a particular patent, etc. Thus, one or more databases are provided with any of the foregoing information.

Moreover, the intellectual property identifiers in the databases **120** may be owned by a particular company or other entity in the form of a docketing database or the like. In the alternative, the databases **120** may be a comprehensive set of intellectual property identifiers which are currently granted, published, and/or otherwise received by a governmental authority, i.e. United States Patent Office.

In addition, servers coupled to remote networks **104**, **106** and/or the third network **108** may also have access to competing activity documentation such as online information, product information, advertising and promotional materials, etc.

Figure **2** shows a representative hardware environment that may be associated with the various network components of Figure **1**, in accordance with one embodiment. Such figure illustrates a typical hardware configuration of a workstation in accordance with a preferred embodiment having a central processing unit **210**, such as a microprocessor, and a number of other units interconnected via a system bus **212**.

The workstation shown in Figure **2** includes a Random Access Memory (RAM) **214**, Read Only Memory (ROM) **216**, an I/O adapter **218** for connecting peripheral devices such as disk storage units **220** to the bus **212**, a user interface adapter **222** for connecting a keyboard **224**, a mouse **226**, a speaker **228**, a microphone **232**, and/or other user interface devices such as a touch screen and a digital camera (not shown) to the bus **212**, communication adapter **234** for connecting the workstation to a communication network **235** (e.g., a data processing network) and a display adapter **236** for connecting the bus **212** to a display device **238**.

The workstation may have resident thereon an operating system such as the Microsoft Windows NT or Windows/95 Operating System (OS), the IBM OS/2 operating system, the MAC OS, or UNIX operating system. It will be appreciated that a

preferred embodiment may also be implemented on platforms and operating systems other than those mentioned. A preferred embodiment may be written using JAVA, C, and/or C++ language, or other programming languages, along with an object oriented programming methodology. Object oriented programming (OOP) has become increasingly used to develop complex applications.

Figure **3** illustrates a method **300** for reporting on competing activity during strategic intellectual property management utilizing a computer-implemented system, in accordance with one embodiment. Initially, in operation **302**, a plurality of intellectual property identifiers identifying intellectual property are received. In the context of the present description, the intellectual property identifiers may be received in any manner. For example, the intellectual property identifiers may be manually entered, received from one of the databases **120**, transmitted over a network, gleaned or "mined" from a collection of data, etc. More information will be set forth hereinafter regarding an exemplary way of receiving the intellectual property identifiers.

Further, in operation **304**, competing activity documentation is identified describing a plurality of competing activities. Similar to the intellectual property identifiers, the competing activity documentation may be received by manual entry, from any sort of database, from the Internet, from a remote application, etc. Moreover, the competing activity documentation refers to any documentation relating to a competing activity, which, in the context of the present description, refers to any activity that does or potentially would infringe on or interfere with the rights (or potential rights) appurtenant to the intellectual property. More information will be set forth hereinafter regarding the competing activity documentation, as will an exemplary way of identifying the competing activity documentation.

As will soon become apparent, competing intellectual property identifiers may be used to identify competing intellectual property in a manner similar to that in which the intellectual property identifiers are used to identify the intellectual property. See operation **306**. While not currently shown, it should be noted that various technology categories may also be defined for later correlation.

Next, in operation **308**, such intellectual property identifiers and the competing activity documentation are stored in memory. Moreover, the intellectual property identifiers are correlated with the competing activity documentation utilizing a processor coupled to the memory (see Figure **2**). See operation **310**. This correlation may include showing any particular relationship between the intellectual property identifiers and the competing activity documentation for the purposes of intellectual property management.

In operation **312**, such correlation between the intellectual property identifiers and the competing activity documentation may then be reported upon utilizing an output device coupled to the processor (again see Figure **2**). More information will now be set forth regarding each of the operations set forth herein above.

Registration of Intellectual Property **(302/304)**

Figure **4** illustrates an exemplary graphical user interface **400** for registration of intellectual property, in accordance with one embodiment. While the current graphical user interface **400** is designed for the purpose of registration of the intellectual property of a particular company, individual, or entity; any other mechanism may be utilized per the desires of the user.

As will soon become apparent, the exemplary graphical user interface **400** is a single interface among many that may be used as a software tool to accomplish the various operations set forth during reference to Figure **3**. Accordingly, other graphical user interfaces associated with other operations of Figure **3**, may be accessed via registration, competing patent data, competing activity documentation, and reporting tabs **401**.

As shown, an intellectual property identifier pull-down window **402** may be provided for selecting an existing intellectual property identifier or adding another. Such pull-down window **402** may be utilized in conjunction with add, delete, and modify icons **404** to accomplish this task. Once added or selected, information relating to the present intellectual property identifier may be entered via various other fields and/or pull-down windows.

For example, a status pull-down window **408** may be provided for assigning a status of the intellectual property identified by the intellectual property identifier. In the case of patents, such status may include disclosure, pending, patented, and/or abandoned. Of course, any other status may be used per the desires of the user.

Still yet, a technology group pull-down window **410** may be provided for assigning the intellectual property identified by the intellectual property identifier to a technology group. Again, the technology group may be selected from an existing list of technology groups or generated using the add, delete, and modify icons **404**. It should be noted that the technology groups refer to any technology genres in which the intellectual property identified by the current intellectual property identifier may be categorized. Such technology categories may be identified with descriptive names of such technology categories.

Other information may be associated with the intellectual property identified by the intellectual property identifier using the current graphical user interface **400**. For example, exemplary claims associated with the intellectual property and/or other pertinent information may be entered, cut-and pasted, dragged-and dropped, etc. utilizing a field **412** of the current graphical user interface **400**.

All of the information stored via the interface **400** can be stored in a central registration database, thereby allowing multiple users to each access individual instances of the interface **400**. As an option, data associated with IP assets can be merged into the registration database from a docketing system or other repository.

A screen showing a report of the current registration information of the intellectual property associated with a currently selected intellectual property identifier can be displayed upon selection of a Properties button **414**. The registration information can include all or a portion of the information added using the graphical user interface shown in Figure **4**.

Figure **5** illustrates an exemplary graphical user interface **500** for registration of competing intellectual property associated with the intellectual property identifiers, in accordance with one embodiment. While the current graphical user interface **500** is designed for the purpose of registration of the competing intellectual property of a particular company, individual, or entity; it should be noted that any other mechanism may be utilized per the desires of the user.

As shown in Figure **5**, either one of the intellectual property identifiers or technology groups may be selected utilizing an intellectual property identifier/technology group pull-down window **502.** It should be noted that such pull-down window **402** may be utilized in conjunction with unillustrated add, delete, and

modify icons to select or add intellectual property identifiers and/or technology groups that are not currently registered.

Also included is a patent number field **504** and an assignee field **506** for entering information (i.e. a competing intellectual property identifier, corresponding assignee, respectively) regarding competing intellectual property. Preferably, the patent number field includes a pull-down menu which allows the user to select previously entered competing intellectual property. Of course, any other pertinent information may be gathered per the desires of the user. By selecting an intellectual property identifier and/or technology group item from the pull down window **502** and filling in/selecting a patent number in the patent number field **504**, the user, in effect, correlates the competing intellectual property with either the intellectual property identifiers and/or technology groups. Note that the patent number field may include any other type of identifier, such as a filing number, internal reference number, etc. of the competing intellectual property.

In an alternate embodiment, the competing intellectual property identifiers may be collected by doing a "forward search" or "backward search" utilizing information positioned on the patent, utilizing the aforementioned databases **120** of Figure **1**, or any other data source. As an option, such a "forward search" or "backward search" may be initiated automatically or manually upon the selection of a corresponding icon **508** found on the graphical user interface **500.** As an example, a backward search can be performed by identifying patents listed on the face of the patent itself or in its text.

As an option, a title field **510** may be provided for entering/displaying the title of the patent whose number appears in the patent number field **504**. Also optionally, a description of the patent can be entered/displayed in a description field **512**. Such description can include the abstract of the patent, a user-generated description, etc.

Further, a comments field **514** can be provided for entering /displaying any type of additional information regarding the competing intellectual property. Additional fields (not shown) can also be included.

The patent title, assignee, description, etc. can be retrieved automatically from a database upon entry (or selection) of the patent number. One database from which the information can be retrieved is the patent database of the U.S. Patent Office, which is accessible via the Internet.

Identifying Competing Activity and Correlating the Same **(306/308)**

Intelligence used during patent selection and procurement can take on many different forms. In the context of the present discussion, intelligence may include any information relating to the contents of a patent portfolio and the activities conducted by a company. Ideally, this intelligence is collected for both the company whose portfolio is being managed, and for any competitor with patents and/or activities that overlap those of the company.

Market Intelligence

With the advent of the Internet and the information age, the ability to gather market intelligence has been tremendously enhanced. In the interest of marketing their products, companies disclose a sizeable amount of information on web-sites to inform the public of product and service activities. This information may take various forms such as press releases, data sheets, user manuals, white papers, etc. Further, many independent third-party organizations provide product and service reviews. Of course, traditional information gathering methods such as reverse engineering, trade shows, etc. are still viable though often more expensive ways of collecting market intelligence.

Patent Intelligence

Less than 10 years ago, the most prevalent method used to collect patent intelligence involved sitting down in the United States Patent Office (USPTO) search room and thumbing through "shoes" of patents. Today, however, on-line databases provide an effective means of accessing a vast amount of information on not only United States patents and patent applications, but also foreign patents, non-patent literature, etc. Examples of such publicly available on-line databases include the USPTO patent search portal (http://www.uspto.gov/patft/index.html) and the Delphion® database (http://www.delphion.com).

In addition to actively searching for patents using the foregoing databases, various services are available whereby search queries are saved and automatically run on a periodic basis. Such services render automatic e-mail alerts or the like to provide a notification of recently published patents and applications matching the search criteria.

Using the foregoing tools, a great deal of valuable information may be obtained for use when building a patent portfolio. As the size of a patent portfolio increases, there is a coinciding need to organize this vast amount of information in a manner in which it can be effectively employed.

Figure **6** illustrates one possible method **600** for collecting competing activity documentation, in accordance with operation **306** of Figure **3**. Such process begins in operation **602**, by executing a network browser application for browsing a network utilizing a processor coupled to the memory (see Figure **2**). Such network browser application may include, but is not limited to MICROSOFT INTERNET EXPLORER,

NETSCAPE NAVIGATOR, or any other application capable of allowing browsing of a network such as the Internet.

During use, in operation **604**, uniform resource locators (URLs) to data sites/files describing a plurality of competing activities are selected utilizing the network browser application. It should be noted that such selection process may be accomplished in any desired manner, such as simply browsing the particular URL.

Once the URL has been selected, an input window may be displayed utilizing the network browser application for allowing the selection of one of the intellectual property identifiers. See operation **606**. Such selection may include manual entry of one of the intellectual property identifiers, or the selection thereof via a list. More information on one exemplary embodiment of such window will be set forth in greater detail during reference to Figure **7**. In an alternate embodiment, the appropriate intellectual property identifier(s) may be identified in a window separate from the network browser application, such that any competing activity documentation selected during use of the network browser application results in automatic correlation with the pre-selected intellectual property identifier(s).

The documentation related to the selected URLs is then stored in the memory, as set forth in operation **608**. Such documentation can include web pages, articles, spreadsheets, slide shows, compressed documents such as files in Portable Document Format (.pdf), etc. and can even include multimedia files and streaming multimedia. Still yet, in operation **610**, the documentation related to the selected URLs may be archived for later use. This feature is critical for storing evidence of such competing activity, as content of URLs are often subject to change.

Preferably, the URL or pointer information is stored with the documentation. Also preferably, the date is also saved with the documentation to show when the documentation was discovered. The date is ideally retrieved from an independent site, such as from the National Institute of Standards and Technology site (http://nist.time.gov/timezone.cgi?Pacific/d/-8/java), so that the date is virtually indisputable.

Next, in operation **612,** the selected intellectual property identifiers are correlated with the URLs utilizing the processor coupled to the memory (see Figure **2**).

Figure **7** illustrates an exemplary graphical user interface **700** for collecting competing activity documentation from the Internet utilizing a network browser application, in accordance with one embodiment. While the graphical user interface **700** described herein is designed for the purpose of collecting such Internet-based competing activity documentation; it should be noted that any other designs may be utilized per the desires of the user.

As shown in Figure **7**, a user may select or enter a URL using a URL field **702,** in combination with a plurality of controls **704**. A page or data associated with the URL is displayed on the browser, upon which a pop-up window **706** may be displayed on the network browser. It should be understood that the pop-up window **706** may be displayed in response to a certain mouse click (i.e. right mouse click), a keyboard command, or any other prompting mechanism. In the alternative, the pop-up window **706** may continuously be displayed when utilizing the network browser in a data collection mode.

In one embodiment, the pop-up window **706** may include a plurality of technology categories which may be selected for correlation with the present competing

activity documentation. As an option, selection of the technology categories may prompt a sub-window **708** to be displayed showing a plurality of intellectual property identifiers previously correlated with the selected technology category. By this design, a specific technology category or intellectual property identifier may be selected with a cursor **710** in order to correlate the competing activity documentation therewith.

Note that the documentation stored may be just the content item positioned under the cursor and/or the entire page.

In an alternate embodiment, a similar pop-up window **706a** may be used which delineates both technology categories and intellectual property identifiers on a single window for selection purposes.

In another alternate embodiment, the competing activity documentation (or the pointer to it) may be dragged and dropped into a "bucket" upon which it is stored as set forth above. See optional buckets **714** in Figure **7**. Further, a bucket may be provided for each technology group and/or intellectual property identifier. In the latter case, the individual bucket may be accessed by a series of submenus, such as the submenus **706**, **708** described above. As an option, the various buckets may be selected (i.e. clicked) for identifying further information about the associated technology group and/or intellectual property identifier to facilitate the search and collection of competing activity.

Still yet, a claim of a particular IP asset associated with a user's search may be selectively displayed in a separate window **712** or some other manner that allows the user to inspect the claim during the search for competing activity. This window **712** may share the screen with the network browser or be placed thereover.

In any case, once selected, a URL and any associated text, links, pictures, other content, etc. may be stored for correlation with the appropriate technology categories and intellectual property identifiers. Such correlation may then be reported later, as will soon become apparent.

It should be noted that the collection of the foregoing intelligence may be a manual process which may be enhanced by the foregoing techniques. Of course, automatic "mining" techniques may be employed to automatically collect information on a periodic basis, or on a user-defined timeline. In any case, it is desired to update the information in the database on a continuous basis, i.e., in real time as data is received or daily, bi-weekly, etc.

Figure **8** illustrates an exemplary graphical user interface **800** for alternatively collecting competing activity documentation from the Internet utilizing any one of three available methods, in accordance with one embodiment. While the current graphical user interface **800** is designed for the purpose of collecting competing activity documentation in three different ways; it should be noted that any other designs may be utilized per the desires of the user.

As shown, an intellectual property identifier pull-down window **802** may be provided for selecting an existing intellectual property identifier or adding another. Such pull-down window **802** may be utilized in conjunction with unillustrated add, delete, and modify icons to accomplish this task. Once added or selected, information regarding the present intellectual property identifier may be entered via various other fields and/or pull-down windows.

As shown, a first file structure field **804** may be used to select competing activity documentation stored in memory of a present machine or across a network. By this file

structure field **804**, a user may browse various folders where such documentation may have been previously stored.

A second method of collection is provided by way of a URL entry field **806**. Such URL entry field **806** may simply be filled with URLs uncovered during use of network browser application. Again, the user may type in the URL, paste a URL in, drag and drop a URL, etc. As an option, the present embodiment may automatically link to the URL via a network upon entry of the URL, retrieve information from the associated site, and store information related thereto.

Still yet another method of collection may be provided via a notes entry field **808** which may be used to fill in information on competing activity. Further, a user may choose to cut and paste and/or drag and drop information in such field.

Optionally, a company pull-down window **802** may be provided for selecting an existing intellectual property identifier or adding another. Such pull-down window **802** may be utilized in conjunction with unillustrated add, delete, and modify icons to accomplish this task. In use, a user may enter a company name to associate with the competing activity documentation. As will soon become apparent, this may be useful during reporting.

Figure **9** illustrates a method **900** for further facilitating the identification of the competing activity documentation, in accordance with one embodiment. In particular, a technique is provided for generating a search string for collecting competing activity correlating with intellectual property. Initially, in operation **902**, at least one claim associated with intellectual property is identified. As an option, this may be accomplished by one of the report functions to be set forth hereinafter. In the alternative, the text of the claim may be simply entered into a predetermined field or the

like. Further, the text of the claim may be automatically retrieved from a database and inserted in the field.

Next, in operation **904**, a plurality of terms are extracted from the claim. This may be accomplished in numerous ways. For example, only verbs and/or nouns may be extracted. Further, only repeated verbs and/or nouns may be extracted. The foregoing preferably occurs without any user interaction. As an option, a list of the extracted terms can be presented to a user to allow the user to add to or deleted from the list of proposed terms. Further, the user may be allowed to prioritize some or all of the terms in the list, e.g., placing the most important term first, the second most important term in the second position, and so on. As an option, terms repeated in the claims may be given a higher priority than other terms, including those repeated less often.

In operation **906**, a search string is generated utilizing the terms. Such search string may include a plurality of terms with "AND" or other searching operators (i.e. <near>, <sentence>, etc.) therebetween. Further, certain key words such as "claim", "said", etc. may be deleted along with other legalese and numerical words, since such language is customary in all claims. As an option, a synonym database may be used to identify synonyms to be "ORed" with the associated original term. This may be used to increase the breadth of the search.

Such search string may be used by a search engine for identifying documentation describing competing activity accessible via a network. See operation **908**. As an option, such search string may be automatically submitted to a predetermined search engine in response to entry of the claim or entry of a command. If the search terms have been prioritized, the search engine preferably gives more weight to the search terms with higher priority.

A thesaurus may be used to generate search queries using alternate words but retaining the meaning of the terms. Preferably, multiple searches are performed for each string generated in operation **906**, each search using a different combination of terms/synonyms. This ensures that competing activity is not overlooked merely because of varying terminology.

Moreover, the search string may be automatically or manually modified based on the results of the search. For example, the terms may be used with <near>, <sentence>, or other more limiting operations (or operands) instead of the AND operator/operand. Alternatively, the terms themselves may be modified. By way of example, only repeated words may be used in the second try.

The process described above with respect to Figure **9** may be performed upon user request, automatically upon occurrence of an event (such as entry of a new patent, a system wide order to perform a search for designated patents, etc.), at predetermined intervals (for automatic information gathering), etc.

Figure **10** shows the manner in which a claim **1000** may be converted into a search string **1002**. Further shown is the manner in which the search string **1002** may be modified to improve the search. Note search string **1004**. Similarly, the modification may expand a shorter string to include more terms, as in a modification of string **1004** to string **1002**.

Figure **11** is a chart showing a data structure **1100** associated with the information collected, in accordance with one embodiment. As shown, the intellectual property identifiers are correlated to various technology categories, competing patents, and competing activity. Of course, various information may be stored in relation to each of these pieces of information to further enhance reporting. Further, the data

structure **1100** may be reconfigured to show the various information as a function of technology categories, competing patents, and competing activity.

Reporting on the Correlation between the Intellectual Property and the Competing Activity **(310)**

One preferred method of organizing intelligence gathered from the foregoing sources is a technique referred to as "mapping." Mapping, in the present context, is a technique for correlating a company's patents with the patents and activities of other companies.

Mapping, if done properly, can provide vast insight into a patent portfolio, which in turn can be actively and strategically used to transform intellectual capital into patents that are well-positioned to effectively meet the defensive and offensive business objectives discussed earlier. For example, mapping can make the strengths and weaknesses of a patent portfolio immediately apparent. Three types of mapping will now be described, after which various techniques of utilizing such intelligence will be set forth.

Technology Mapping

Technology mapping refers to the process of organizing a patent portfolio via separation of the patents in that portfolio into multiple technology groups, thus giving insight into the strength of patent protection of a company in various technological areas. One easy way to conduct technology mapping is to classify patents in terms of the class assigned by a patent office. In order for technology mapping to be most effective, however, the technology groups should be chosen based on relevance to the business of the company and any competitors. Thus, it is best if the technology groups

are manually selected. A company's product line and divisions are often the best places to begin identifying pertinent technological categories.

Once the technology groups have been selected, the patents in a patent portfolio may be categorized according to the most relevant technology group. Thus, the result of such technology mapping is an indication as to the number of patents in each of the technology groups. This information provides an immediate clue as to the strengths and weaknesses of a company's patent portfolio in terms of pertinent technological areas. Moreover, technology mapping can parse a large portfolio into a number of digestible portions, making it much more manageable.

Patent Mapping

Patent mapping provides a comparison of a company's patent portfolio with those of competitors. Patent mapping may take various forms. For example, each patent of a company's portfolio may be reviewed to identify patents referenced by a patent office examiner during prosecution, as well as other patents that reference the particular patent. This information is often referred to as forward and backward citing. Other types of queries may be used to locate related patents based on patent class, bibliographic information, etc. Again, publicly available databases are critical in gathering such patent intelligence.

Ideally, patent mapping involves not only issued patents, but also pending patent applications. While recently-filed patent applications are usually not available for competitor patent portfolios, it should be noted that patent applications are published under the Patent Cooperation Treaty (PCT) and under recent amendments to United States patent law. Such publications may give at least a glimpse of a competitor's current technological focus.

Patent mapping often aids in identifying competitors with research and development which overlaps that of a company. Further, such patent mapping provides information with which patent value may be determined or evaluated. For example, if a particular patent has been referenced by a large number of patents in a short time period, such patent is likely a pioneering-type patent representing a base technology from which other competitors are expanding. To this end, the "crown jewel" patents may be ascertained using the present form of patent mapping.

As mentioned above, patent mapping may take various forms. An alternative or supplementary type of patent mapping is more company-driven, as opposed to patent-driven like the foregoing technique. When conducting a company-driven patent map, one must first select several companies of interest. Once the companies of interest are identified, the patents of these companies must be identified.

With these competing patents in hand, they may be sorted into the technology groups selected during the technology mapping. This type of patent mapping may thus be used to "size up" the competition while identifying particular strengths or vulnerabilities with respect to a particular competitor. Further, the present technique provides insight into the patents in a specified area of technology.

If the results of the patent mapping are stored and presented in an appropriate medium, an intelligence information base may be afforded where all of a company's patents may be accessed, along with the patents of key competitors. One caveat to note is the potential liability under any notice of such patents and associated willful infringement. This risk may be weighed against the foregoing benefits, and procedures may be concurrently established to minimize such risk.

License Mapping

License mapping is perhaps the most valuable intelligence that can be used to increase the value of a patent portfolio. This intelligence primarily focuses on two types of information, a company's patents and patent applications, and the activities of competitors. Competitive market intelligence is vital for license mapping.

One way to approach license mapping involves a patent-by-patent review of a portfolio, whereby the activities of competitors that correlate with the technology covered by each patent are identified. Of course, the best way to identify the technology covered by each patent is to review the claims. For reasons that will soon become apparent, the market intelligence gathered during the course of the present mapping need not and should not only be those competing activities that are deemed to be infringing the claims of issued patents, but also competing activities that prove to correlate with the claims of pending patent applications.

Similar to patent mapping, license mapping provides information with which a value of a patent may be determined. If a particular patent has a large number of instances of correlating competing activities, such patent is likely to represent significant licensing potential. Further, such patents may likely be useful in a defensive situation in any effort to secure a company's freedom of action.

Figure **12** illustrates an exemplary graphical user interface **1200** for defining a report utilizing collected competing activity documentation, in accordance with one embodiment. While the current graphical user interface **1200** is designed for the purpose of defining a search, it should be noted that any other designs may be utilized per the desires of the user.

As shown, an intellectual property identifier pull-down window **1202** may be provided for selecting an existing intellectual property identifier, or all of the existing intellectual property identifiers. As shown, a technology category pull-down window **1204** may also be provided for selecting an existing technology category, or all existing technology categories.

As mentioned above, other designs of the graphical user interface **1200** can be used. For example, the identifiers and categories can be listed in scrollable windows rather than pull-down windows **1202**, **1204**. Thus, for example, the user can select particular items in the scrollable windows by holding down the CTRL key and selecting multiple items.

Once selected, a report type may be selected using a report type pull-down window **1206**. Such report types may vary per the desires of the user. For example, such report types may include a technology map, a patent map, a license map, an inventor map, a mapping of the intellectual property firm that prepared any portion of the intellectual property documentation, or simply provide a summary or details pertaining to the selected intellectual property identifier and/or technology category. More information on such reports will be set forth hereinafter in greater detail.

As an option, a report format may be selected using a report format pull-down window **1208**. Such format may include the use of different charts (i.e. pie chart, bar graph, etc.) or may organize the data in various ways. It should be understood that not only the format, but the reports themselves may be specifically configured per the desires of the user using the data of Figure **11** in any desired manner.

Once selected and/or configured, the report may be printed, displayed, or emailed using the icons **1210** shown in Figure **12**. Other options (not shown) include saving the report to memory, etc.

Figure **13** illustrates an exemplary technology map report **1300**, in accordance with one embodiment. Such technology map report **1300** may be outputted in response to the selection of the technology map report using the report type pull-down window **1206** of Figure **12**, and selecting all of the categories using the technology category pull-down window **1204.** Of course, fewer technologies may be selected for display per the desires of the user.

As shown, each technology group is represented with a plurality of bar graphs **1302** including a first bar **1304** for representing a number of intellectual identifiers associated with the particular technology group. Also included is a second bar **1306** indicative of a number of competing patents in the particular technology group. Still yet, another third bar **1308** is used to represent relatively the number of instances of competing activity in the particular technology group. Note that the graphs may be in another form, such as pie graphs, line graphs, etc. For reasons that will soon become apparent, a summary icon **1310** may also be provided.

As mentioned earlier, the various reports may be printed, emailed, and/or displayed. It should be noted that the electronic versions of the report (those that are displayed utilizing a computer) may include interactive features to further analyze the data by drilling down into selected areas. More information will now be set forth regarding a method with which this can be accomplished.

Figure **13A** illustrates another exemplary technology map report **1350**, in accordance with a 3-D embodiment. Such technology map report **1350** may be

outputted in response to the selection of the technology map report using the report type pull-down window **1206** of Figure **12**, and selecting all of the categories using the technology category pull-down window **1204**. As an option, the technologies may optionally be arranged in subsets, as shown. The companies may be selected in a similar manner, or in any context desired.

As shown, a plurality of rows of bar graphs **1352** are included, which are each row of associated with a particular company. Also, included is a plurality of columns of the bar graphs **1352**, which are each column is associated with a particular technology group. Of course, the foregoing columns and rows may be transposed. Note that the graphs may be in another form. Summary icons **1360** may also be provided.

As mentioned earlier, the various reports may be printed, emailed, and/or displayed. It should be noted that the electronic versions of the report (those that are displayed utilizing a computer) may include interactive features to further analyze the data by drilling down into selected areas. More information will now be set forth regarding a method with which this can be accomplished.

It should be noted that, in the context of the user interface **1350** of Figure **13A**, the selection of one of the "bars," summary icons **1360**, or any other associated icon may first generate a 2-D graph corresponding with a horizontal or vertical slice of the 3-D graph of user interface **1350**.

For example, upon the selection of Company2, a 2-D graph showing the IP assets of two companies [i.e. main Company1 (default) and Company2] may be shown side-by-side as set forth in the interface **1380** of Figure **13B**. In other words, the selection of one of the companies may produce a 2-D graph illustrating a comparison of two companies (the one selected and a default "client" company) in each of the

technology groups, where the selection of one of the "bars" or corresponding icon may indicate a list of patents in such group, and further where the selection of one of the patents may produce specific information regarding such patent; in a manner similar to that will soon be set forth. Thus, such interface **1380** of Figure **13B** may then be "drilled-down" in a manner similar to that of IP Assets and Competing Patent Data graphics of Figure **13**, as will soon become apparent.

In a similar manner, it should be noted that the selection of a particular technology group may produce a 2-D graph illustrating a comparison of each of the companies in the specific technology group, where the selection of a "bar" or related icon may indicate a list of patents owned by such company in the particular technology group, and further where the selection of one of the patents may produce specific information regarding such patent; in a manner similar to that will soon be set forth.

Of course, the interface **1380** of Figure **13B** may be skipped by simply clicking the "bars" or related icon of the report **1350** of Figure **13A**.

Figure **14** illustrates a method **1400** for providing a graphical user interface such as that of Figure **13** (or even that of Figures **13A-B**) which is equipped for reporting on strategic intellectual property management. In operation **1402** a technology category page is displayed depicting a plurality of categories of technology utilizing a graphical user interface.

As set forth in the exemplary graphical user interface **1300** of Figure **13**, the technology category page includes statistics regarding a plurality of intellectual property identifiers identifying intellectual property in each of the categories of technology. Also included is competing activity documentation describing a plurality of competing

activities in each of the categories of technology. Note operation **1404**. Of course, as mentioned before, competing patent data may also be included.

In operation **1406**, a user may be allowed to select a summary icon on the graphical user interface **1300.** In use, such icon may act as a link to another page which sets forth additional information.

Figure **15** illustrates an exemplary summary report **1500**, in accordance with one embodiment. Such report **1500** may be displayed in response to the selection of the summary icon **1310** of one of the technology categories shown in the interface **1300** of Figure **13**. In the alternative, such page may be generated in utilizing the report definition interface **1200** by selecting a particular technology category via pull-down window **1204,** selecting all of the intellectual property identifiers via pull-down window **1202**, and selecting a summary format type. Of course, the summary report **1500** may be generated in any desired manner.

As shown, the summary report **1500** lists each of the intellectual property identifiers, each competing patent, and each instance of competing activity associated with the appropriate technology category. For reasons that will soon become apparent, each item in the lists **1502** may include a link to an additional page with more information.

In an alternate embodiment, an intellectual property identifier icon, competing patent icon, or a competing activity documentation icon may be selected separately. In such embodiment, the icons may include the bars **1304-8**. Upon the selection of one such icons, only the intellectual property identifiers, competing patents, or competing activity documentation related to the particular technology category may be displayed, the intellectual property identifiers may be displayed. Note operation **1406**.

With continuing reference to Figure **14**, more information may be displayed regarding the intellectual property, the competing activity, and the competing patents in response to a user request in operation **1408**.

In particular, upon a user selecting one of the intellectual property identifiers in the lists **1502**, more information relating to such intellectual property may be presented. Figure **16** illustrates an exemplary intellectual property details report **1600**, in accordance with one embodiment. As shown, a patent number, status, exemplary claim and figure, etc. may be provided in such report. It should be noted that such intellectual property details report **1600** may also be generated directly utilizing the report definition interface **1200** by selecting a particular intellectual property identifiers via pull-down window **1202**, and selecting a details format type.

Of course, the details report **1600** may be generated in any desired manner.

Still yet, upon a user selecting one of the competing patents in the lists **1502**, an assignee, patent number, status, exemplary claim and figure, etc. may be provided. Figure **17** illustrates an exemplary competing patent details report **1700**, in accordance with one embodiment.

The user may also select one of the instances of competing activity from the lists **1502** of Figure **15**. In response thereto, more information on such selected competing activity may be provided. Figure **18** illustrates an exemplary competing activity details report **1800**, in accordance with one embodiment. As shown, a URL/pointer, description, picture, marketing information and/or textual summary may be provided which were earlier archived. As an option, the URL/pointer may be linked directly from the report **1800**.

Figure **19** illustrates an exemplary patent/license map report **1900**, in accordance with one embodiment. Such patent/license map report **1900** may be outputted in response to the selection of the patent or license map report using the report type pull-down window **1206** of Figure **12**, and selecting all of the intellectual property identifiers using the intellectual property identifier pull-down window **1202.** Of course, fewer intellectual property identifiers may be selected per the desires of the user.

As shown, each intellectual property identifier is represented with a plurality of bar graphs **1902** including a plurality of bars each representative of a particular company that may be considered a competitor to the user. Further, a size of each bar may represent a number of competing activities or competing patents associated with the particular intellectual property identifier. In the case of the selection of the patent map report using the report type pull-down window **1206,** such size of each bar may represent a number of competing patents. In the case of the selection of the license map report using the report type pull-down window **1206,** such size of each bar may represent a number competing activities. Of course, both may be displayed simultaneously if desired by the user, and the size of the interfaces permits the same. Similar to the report **1300** of Figure **13**, a plurality of summary icons **1904** may be included.

Figure **20** illustrates an exemplary summary report **2000**, in accordance with one embodiment. Such report **2000** may be displayed in response to the selection of the summary icon **1904** of one of the technology categories shown in the interface **1900** of Figure **19**. In the alternative, such page may be generated in utilizing the report definition interface **1200** by selecting one of the intellectual property identifiers via pull-down window **1202**, and selecting a summary format type. Of course, the summary report **2000** may be generated in any desired manner.

As shown, the summary report **2000** lists each of competing company along with the corresponding competing patents, and competing activity thereof. For similar reasons as before, each item in the lists **2000** may include a link to an additional page with more information.

As one option, selected details displayed on the details report may be retrieved from the Electronic Business Center of the United States Patent and Trademark Office. Such details can include filing date, current status, file history in the Office, and/or any other information retrievable from the Electronic Business Center.

Figure **21** illustrates a method **2100** for strategic intellectual property management utilizing a computer-implemented system, in accordance with one embodiment. As an option, the present method **2100** may be implemented in the context of the foregoing architecture and techniques. Of course, however, the present method **2100** may be implemented in any desired context.

Initially, a plurality of action items associated with a plurality of intellectual property assets are listed or otherwise displayed in any desired manner. Note operation **2102**. It should be noted that the action items may be generated utilizing a docketing database, like the one mentioned above. For example, the action items may include taking an invention disclosure, filing a patent application, filing an information disclosure statement for a patent application, foreign filing a patent application, responding to an office action for a patent application, paying an issue fee for a patent application, filing a continuation patent application for a previous patent application, and/or paying a maintenance fee.

While this may be accomplished in any desired manner, more information regarding one exemplary way of displaying such action items will be set forth during the description of Figure **22**.

Next, in decision **2103**, it is determined whether any of the action items has been selected. This may be accomplished in any desired manner (i.e. a mouse click, etc.). Once selected, a report capable of aiding a user in fulfilling the selected action item is displayed, as indicated in operation **2104**. While this may be accomplished in any desired manner, more information regarding one exemplary way of such reporting will be set forth during the description of Figure **22**.

Moreover, a recommendation is generated as to the fulfillment of the identified action item. Such recommendation may be based on any desired combination of factors. For example, it may be based on a technology mapping, citation mapping, patent mapping, license mapping, a rating, and/or any other type of business logic. As mentioned earlier, a database of such ratings, business logic, as well as other information may be made available for such purpose. Still yet, the recommendation may use Boolean logic or even user-configured logic to generate the appropriate recommendation. For example, a user may indicate that any patent application with a rating lower than X "AND" which is in a technology group where, quantitatively, a company already has more foreign patent applications than a list of key competitors (as determined by a real-time search in a database of foreign patents) will render a recommendation of "NOT FOREIGN FILING."

Next, in decision **2108**, it is determined where a decision as to the fulfillment of the identified action item has been received from the user. Of course, the user may base such decision on the report and the recommendation, which was generated

automatically, on-the-fly using the latest information from the integrated databases (i.e. docketing, competitive patent database, etc.

Once received, the decision is reported to another party (i.e. outside counsel, junior attorney, etc.) for fulfillment. This, of course, may be accomplished in any desired manner. For example, an automatically generated e-mail may be sent. While this may be accomplished in any desired manner, more information regarding one exemplary e-mail will be set forth during the description of Figure **24**.

As an option, the reporting may include a request for confirmation of the fulfillment. Thus, upon receipt of a confirmation (see decision **2112**) such action item may be removed from the list in operation **2116**. If, however, a confirmation is not received just prior to the deadline (i.e. any desired threshold time period), as determined decision **2113**, a follow-up report may be sent in operation **2114**.

Figure **22** illustrates a sample graphical user interface **2200** for listing a plurality of upcoming action items **2202**. As an option, such graphical user interface **2200** may be used in the context of operation **2102** of Figure **21**. Of course, however, such interface **2200** may be used in any desired context.

In one embodiment, the action items may be listed in chronological manner. An associated deadline date may even be displayed. It should be noted that the graphical user interface **2200** may serve as a "central" management interface. In such case, a plurality of general statistical data may be included on such interface **2200.** For example, a general "high-level" patent map **2206** or technology map **2204** may be included, as shown, or in any desired manner. Such patent map **2206** or technology map **2204** may include all of the patents in all of the technology groups associated with a company.

Figure **23** illustrates a sample graphical user interface **2300** for reporting information relative to an upcoming action items. As an option, such graphical user interface **2300** may be used in the context of operation **2102** of Figure **21**. Of course, however, such interface **2104** may be used in any desired context.

As shown, various reports may be provided including, but not limited to a patent map **2304**, technology map **2302**, a citation-tree **2306**, any archived competitive activity **2308** (see, for example, Figure **18**), an indication **2314** as to whether the invention is currently being practiced by the assignee company (note: this could be retrieved from one of the business logic databases, etc.), a rating **2318** associated with the patent application/patent. Moreover, a search button **2310** may be provided for conducting an Internet search to determine whether the invention is being practiced by competitors. As an option, this may be accomplished using the query generator of Figures **9-10**. Still yet, a recommendation **2312** may be provided, which may be calculated in the aforementioned manner. To carry out the decision **2108** of Figure **21**, a pair of buttons **2323** and **2324** are provided. Optionally, any portion of any of the reports may be e-mailed to other parties via an e-mail button **2320**.

A plurality of different reports is disclosed in graphical user interface **2300**. It should be noted, however, that different information may be reported based on and specific to the specific action item at issue. Following are examples of various combinations of different reports which may be issued as a function of the action item.

In one embodiment where the selected action item includes filing a first-filed patent application, the report may include at least one of 1) rating and 2) a patent map including pending patent applications and issued patents of at least two companies. In one specific embodiment, the present patent map may show the relative quantitative

strength of patents (and possibly patent applications) of a variety of competitors (as possibly defined by the aforementioned business logic database) in a variety of technology groups (also possibly defined by the aforementioned business logic database). Of course, any desired recommendation (based on user defined logic or possibly not) may be listed to facilitate the decision.

In another embodiment where the selected action item includes filing an information disclosure statement for a patent application, the report may include a patent map associated with a technology group in which the patent application resides. In one specific embodiment, immediate access may be given to the patents of such patent map (i.e. via the aforementioned drill down technique, or the like); such that the patents requiring to disclose to the patent office in an information disclosure statement may be identified. Of course, any desired recommendation (based on user defined logic or possibly not) may be listed to facilitate the decision.

In other words, a patent report may be automatically be outputted in response to an information disclosure date deadline (i.e. 3 months from a filing date of a patent application, etc.). Such patent report may further include all of the patents in the same technology group as the subject patent application, based on a patent mapping. Still yet, the format of such report may take on a specific format (i.e. FORM 1449, etc.) that allows convenient submission to the United States Patent Office. Again, the report may be automatically sent (by email, etc.) to an attorney/agent responsible for the case associated with the particular intellectual property identifier. Such attorney/agent may be in-house or outside counsel. As yet a further option, electronic copies (i.e. PDF-versions, etc.) of the actual patents may also be sent. This feature thus ensures that the applicant adheres to his or her duty of disclosure under the knowledge of the patents collected during a patent mapping effort.

In still another embodiment where the selected action item includes foreign filing a patent application, the report may include at least one of 1) a patent map including foreign patents of at least two companies, and 2) a rating.

For example, a report may be generated to indicate a rating for a particular patent application. This rating may be based on a number of competing patents in the associated technology group. Still yet, such rating may be based on a number of international patents in a particular associated technology group. Even still, a number of associated licensing hits may factor into such rating. In any case, such rating may be automatically sent to the appropriate person some time before the one-year foreign filing deadline following the patent application filing date. Thus, the intelligence provided by the present system may be used to more intelligibly file foreign patent applications.

In cases where the application was filed under a consolidation treaty (i.e. patent cooperation treaty – PCT), the patent application may be similarly rated as to where it should be filed under a national phase, or whether there should be a national phase filing at all. In the present case, the rating may be factored based on a number of competing foreign patents in a particular technology group. For example, if a primary competitor has more than a threshold number of patents of a similar technology in a particular country, the aforementioned rating may be high. As an option, the threshold may be governed by a comparison of a number of company patents versus a number of competing patents.

In still yet another embodiment where the selected action item includes paying an issue fee for a patent application, filing a continuation patent application, or paying a maintenance fee; the report may include at least one of 1) a license map, 2) a citation map, 3) a rating, and 4) search results. Of course, any desired recommendation (based on user defined logic or possibly not) may be listed to facilitate the decision.

In still another example, a competing activity report or any other desired reports may automatically be outputted in response to a docketed patent issue date arriving. This may trigger a licensing effort or the like.

As is apparent from these specific examples, the competing activity report and/or other reports may be generated based on occurrences of a docketing system/file and further utilizing information stored therein. In one additional embodiment, the format, destination, use, etc. of the report may vary based on the status, any docketed dates, or any other docketing system/file information associated with the intellectual property identifier.

As an option, the reports may take the form of alerts based on a current status of the database (see, for example, Figure **11**), user-configured rules or thresholds, and even the docketing system. For example, a user may designate a Company x. If a number of patents of Company x ever exceeds a company's patents in any technology area, an alert (i.e. HTML, e-mail, SMS, etc.) may be issued to a user. Of course, any threshold or rule may be used (i.e. percentage based, formula-based, etc.). In one embodiment, the alert may identity the competing company, the technology area, and the rule or threshold that was triggered. These alerts may be used in various ways. Just by way of example, the foregoing alert may be prompt a user to file additional patent applications in the pertinent technology area.

In use, the foregoing versatile reporting framework may be employed to increase the value of a patent portfolio and further aid in the exploitation thereof. For example, competing activity and competing patent information may be used to determine in which areas invention disclosures should be taken, and further which invention disclosures should be filed as patent applications. Reports on the competing activity

may also be used during the prosecutions of patent applications in order to ensure that claims not only define patentable subject matter, but also read on the competing activity. Still yet, the reports on the competing activity may be used to exploit issued patents in the form of licensing initiatives and the like. Further, the framework and reports may be used to assist a company in avoiding infringement of intellectual property rights and/or payment of licensing revenues by allowing them to gather, track, and examine potential adverse rights.

Additional information will now be set forth regarding the various ways the intelligence set forth hereinabove may be used to increase the value of a patent portfolio.

Strategically Selecting Disclosures to File for Patent Protection

Using the various mappings, a company can level the playing field with competitors by filling any gaps in a patent portfolio. When filtering invention disclosures to select those to file, for example, the technology mapping may be used to determine whether a patent on a particular disclosure would bolster patent protection in a technology area in which the company has few patents and patent applications. Moreover, this technique may be used to ensure market dominance in desired technology areas or identify opportunities for patent monopolies in unexplored technology groups. Further, by examining competing patent groupings, a company can determine whether it is falling behind in a particular area. Still yet, the present technique may be used to avoid patenting the same invention or minor variations thereof more than once.

Strategically Selecting Continuation Patent Applications

As mentioned earlier, the licensing map effectively identifies the crown jewel patents of a company. If such identification takes place before a patent has issued, this intelligence may warrant a continuation filing. By maintaining the pendency of such patent applications, maximum value may be extracted from the patent application by filing additional claims, broadening existing claims to ensure literal infringement, etc.

Increasing the Value of Already Pending Patent Applications

After conducting a licensing map, the resulting market intelligence may be used during patent prosecution to add claims that cover the newly identified activities. Thus, a patent application may be aligned with competitor activity, thus increasing the value of such patent application when it issues. In light of potential estoppel issues, it is preferred that claims only be added, as opposed to being amended.

Also, such market intelligence may be used when responding to an office action issued by a patent examiner. Traditionally, only the claims and prior art are the subject of attention when responding to an office action. By introducing a third element, market intelligence, claims can be amended in a manner which ensures that a more valuable likely-to-be-infringed patent issues as opposed to claims prosecuted in a vacuum.

Accelerating the Examination of Patent Applications

After conducting a licensing mapping, pending patent applications identified as being infringed may be eligible for accelerated examination by filing a petition to make special under 37 CFR 1.102 and 37 CFR1.496[3]. One caveat to such practice is that a patent practitioner should determine whether the evidence indicates that the competitor activity is prior art. If this is the case, an information disclosure statement should be filed rather than a petition to make special.

Conducting a Licensing Initiative

Using the market intelligence gathered during license mapping, licensing opportunities may be brought to light. Such intelligence may be used as a starting point in generating revenue through a licensing initiative.

Litigation Support

With the various mappings established and actively being used during patent procurement, a knowledge base is created that may be used to analyze and gather information about a portfolio for a variety of additional purposes. For example, the licensing mapping may be used to identify patents to be used defensively if confronted with one or more patents of a competitor in a litigation context. The patent mapping may also be used to "size up" a company from whom licensing revenue is being sought.

Figure **24** illustrates a sample e-mail **2400** that may be used to report a decision as to an intellectual property action item for fulfillment, in accordance with one embodiment. As an option, such e-mail **2400** may be used in the context of operation **2110** of Figure **21**. As a further option, the e-mail **2400** may also represent the follow-up e-mail of operation **2114** of Figure **21**. Of course, however, such e-mail **2400** may be used in any desired context.

As shown, the e-mail **2400** may include a link for allowing the recipient of the e-mail **2400** to indicate whether the action item has been fulfilled. While a link is shown, it should be noted that a reply e-mail may be set with such indication or the link. Upon receipt of the replay e-mail or the link is used to indicate fulfillment of the action item, the system is capable of removing the associated action item off the list.

While various embodiments have been described above, it should be understood that they have been presented by way of example only, and not limitation. For example, any of the network components may employ any of the desired functionality set forth hereinabove. Thus, the breadth and scope of a preferred embodiment should not be limited by any of the above-described exemplary embodiments, but should be defined only in accordance with the following claims and their equivalents.